



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket: BOMBARDINI=1

In re Application of:)	Conf. No.: 3096
)	
Tonino BOMBARDINI)	Art Unit: 3736
)	
Appln. No.: 10/023,761)	Examiner:
)	
Date Filed or 102(e) date:)	
December 21, 2001)	Washington, D.C.
)	
For: METHOD AND DEVICE FOR THE)	July 16, 2004
DIAGNOSIS AND THERAPY OF...)	

REPLY: AMENDMENT AND REMARKS

RECEIVED

JUL 20 2004

TECHNOLOGY CENTER R3700

Mail Stop Non-Fee Amendment
Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Replying to the Office Action mailed April 22, 2004,
please amend as follows:

Amendments to the Claims are reflected in the
listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for the diagnosis and therapy of chronic heart failure comprising continuous monitoring of the patient and continuous determination of significant decompensation parameters during a sample period of normal patient life, recording the data determined, continuously monitoring these data during therapy, comparing the memorized data with those determined during the same time span of the sample period and comparing the duration of periods in which decompensation is present with the total duration of those periods during which decompensation is absent or conforms to that determined during the sample period, wherein the memorized parameters comprise the curve of ventricular contractile force variation as a function of heart rate.

Claims 2-4. (Canceled)

5. (Currently Amended) A method as claimed in claim 1, ~~characterised in that~~ wherein the memorized parameters are the heart rate, the ventricular contractile

force, and the curve of force variation as a function of heart rate.

6. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~ wherein the memorized parameters are the heart rate, the ventricular contractile force, and the curve of force variation as a function of heart rate at determined moments of the sample period.

7. (Currently Amended) A method as claimed in claim 5, ~~characterised by~~ in which memorizing the force-frequency curve variations occurs at least during a period equal to the sample period.

8. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~ deriving the force data ~~are derived~~ from the intracardiac pressure curves.

9. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~ deriving the force data ~~are derived~~ from the peripheral pressure curves.

10. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~ deriving the force data ~~are derived~~ from the ventricular volumes.

11. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~deriving the force data are ~~derived from~~ the pressure/volume relationship.

12. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~deriving the force data are ~~derived from~~ cardiac tone (force of contraction and/or rate of tension development).

13. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~deriving the force data are ~~derived via~~ impedance.

14. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~deriving the force data are ~~derived from~~ Doppler flow measurement.

15. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~deriving the force data are ~~derived with~~ echo-Doppler.

16. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~deriving the force data are ~~derived from~~ a combination of all or part of the following parameters: the intracardiac pressure curves, the peripheral pressure curves, the ventricular volumes, the pressure/volume

relationship, the cardiac tone, the impedance, the Doppler flow measurement, the echo-Doppler measurement.

17. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~ expressing the ventricular force ~~is expressed as~~ $dP/dt/EDV$, which indicates the maximal rate of left ventricular pressure development divided by end-diastolic volume (EDV).

18. (Currently Amended) A method as claimed in claim 5, ~~characterised in that~~ expressing the ventricular force ~~is expressed as~~ sP/ESV , which indicates the left ventricular end-systolic pressure volume ratio (end-systolic ventricular pressure divided by the end-systolic volume).

Claims 19-31. (Canceled)